Blueprint for Regional Mobility 5-Year Refresh

An update on the region's first employer-led transportation agenda, from Baltimore to Richmond



Contents

- Measuring Progress A Refreshed Mobility Agenda 1 for the Region
 - Executive Summary 2
 - Background

2

- Post-Pandemic Regional Transportation Landscape 3
 - Refreshed Next Moves (2024-2028) 5
 - Immediate Priorities (2024-2025) 6

Progress Update 8

- Progress on Solution 1: Modernize Intercity & Commuter Rail 10
- Progress on Solution 2: Improve Roadway & Trail Performance 12
 - Progress on Solution 3: Create High-Performing Public Transit 14
 - Progress on Solution 4: Grow Employer Mobility Programs 16
 - Progress on Solution 5: Expand Access to Opportunity 18
 - Progress on Solution 6: Enable a Technology-Driven Future 20
 - Progress on Solution 7: Reform Governance & Funding 22
 - Conclusion 24
- Appendix A: Refreshed Next Moves Project Details 26
 - References 28

MODERNIZE INTERCITY & COMMUTER RAIL	Ö
IMPROVE ROADWAY & TRAIL PERFORMANCE	1
CREATE HIGH-PERFORMIING PUBLIC TRANSIT	Ŗ
GROW EMPLOYER MOBILITY PROGRAMS	
EXPAND ACCESS TO OPPORTUNITY	6
ENABLE TECHNOLOGY- DRIVEN FUTURE	4
REFORM GOVERNANCE & FUNDING	,ā

Measuring Progress – A Refreshed Mobility Agenda for the Region

In 2018, Greater Washington Partnership laid out a performance-based, superregional agenda to transform our transportation system into an asset that boosts our global competitiveness. The Blueprint for Regional Mobility was developed with support and input from hundreds of public and private stakeholders across the region and established a bold vision for regional mobility that matched our region's strengths, diversity, and immense potential.



More than five years on, the region has had many mobility wins worth celebrating. We have witnessed generational investments in the region's passenger rail network, the completion of landmark transit expansion projects, and wider adoption of performance-driven tolling around the region. These commitments all advance the goal of making this the best region to live, work, and build a business.

But as much as these last five years have been defined by success, they have also been marked by challenges. The COVID-19 pandemic, and the historic inflationary pressures that followed, altered traditional mobility patterns and upset regional transportation funding.

By measuring progress against the priorities and actions identified in the Blueprint for Regional Mobility and refreshing them accordingly, we are informing the next five years of our collective work to champion regional economic development and competitiveness through strategic transportation infrastructure investments. These refreshed priorities signal the Partnership's continued commitment to the region, its residents, and the long-term success of the region's business community as a driver of inclusive economic growth and innovation. This period of uncertainty – marked by lagging transit ridership recovery, rebounding levels of roadway congestion, and funding deficits – highlights the importance of having a long-term transportation vision for the super-region. By prioritizing the most strategic and transformative investments in our multi-modal transportation system, we can secure the region's long-term prosperity and economic growth while supporting the needs and aspirations of more than 10 million residents who call this region home.

& lA m Bl



🦰 MedStar Health

ROBERT BLUE President and CEO, Dominion Energy

Cemet a faret

KENNETH A. SAMET President and CEO, MedStar Health

Mal Weinley MARK WEINBERGER Former Chairman and CEO, EY

Co-Chairs, Greater Washington Partnership Regional Mobility & Infrastructure Committee

Executive Summary

Background

In 2018, the Greater Washington Partnership published its Capital Region Blueprint for Regional Mobility (the Blueprint).

The Blueprint was the region's first employer-led, comprehensive, region-wide transportation agenda to improve mobility across jurisdictional borders and integrate all transportation modes. The Partnership identified seven solution areas to connect the super-region, improve the consumer experience, ensure equitable access, and integrate innovation:

Modernize
Intercity &
Commuter
Rail

Improve Roadway & Trail Performance

Create High-Performing Public Transit Grow Employer Mobility Programs Expand Access to Opportunity Enable a Technology-Driven Future

Reform Governance & Funding

Within these seven solution areas, the Blueprint outlined twenty actions and more than sixty-five recommended next moves to improve the performance and reliability of our transportation system over ten years — transforming the system into an asset that ensures we remain globally competitive.

The Partnership has worked to advance these seven solution areas by convening stakeholders across jurisdictional borders, supporting action-oriented research, developing thought leadership, aligning support behind regionally significant projects, and representing the voice of the business community in regional policy discussions.

However, in the five years since we released the Blueprint, there has been a paradigm shift in the transit and transportation landscape. The COVID-19 pandemic changed behaviors of both businesses and commuters turbocharging the adoption of remote and hybrid work — which continue to evolve.

To help bridge the gap between the landscape in 2018 and the current environment, we investigated:

- Progress on the original actions and solutions;
- Challenges mitigated or exacerbated over the past five years;
- New transportation issues and opportunities on the horizon; and
- Developments in federal, state, and local strategy and funding opportunities.

2 | EXECUTIVE SUMMARY



Post-Pandemic Regional Transportation Landscape

The region has experienced significant shifts in the transportation landscape since the Partnership released the Blueprint for Regional Mobility in 2018. The COVID-19 pandemic caused changes in behavior among businesses and residents, including travel and commute patterns.

"Expanding access to mobility is critical to fostering inclusive economic growth and development across the region. The Greater Washington Partnership is committed to working with regional leaders to advance this vision."

Bill Stromberg, Chair and former CEO and President, T. Rowe Price

Transit and Passenger Rail

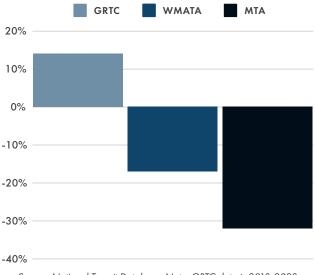
Rail transit ridership still has not recovered to pre-COVID levels. The Washington Metropolitan Area Transit Authority (WMATA) reported 2024 weekday rail ridership is 60% of pre-pandemic ridership, although weekend rail ridership is up to 106% of pre-pandemic levels.^{1, 2} As of early 2024, Maryland Transit Administration (MTA) Subway and Light Rail ridership was 65% of pre-pandemic ridership.³

Local bus ridership, in contrast, is seeing robust demand. WMATA has seen weekday ridership rebound to 98% as of February 2024, and weekend ridership is up to 140% of the pre-pandemic baseline.⁴ In Richmond, average daily Greater Richmond Transit Company (GRTC) bus ridership – alongside implementation of zero-fare service – is 9% higher than in 2019.⁵

Transit demand has also shifted throughout the day and week, likely due to higher levels of hybrid work, and peak periods are now spread out more evenly throughout the day. Ridership recovery across regional and intercity rail has been more mixed. Ridership on the Virginia Railway Express (VRE) and Maryland Area Rail Commuter (MARC) regional rail services is at 43% and 45% respectively when compared to 2019 levels.⁶ Conversely, in 2023, Amtrak Virginia recorded its highest ridership since statesupported service began in 2009 and a 20% increase in ridership from 2019 along the Richmond corridor.⁷

Funding for transit has continued to be a major concern. While WMATA faced financial difficulties before the pandemic, low ridership and inflation have exacerbated the situation.

Change in Ridership, 2019-2024



Source: National Transit Database; Note: GRTC data is 2018-2023

Heading into FY25, WMATA's budget shortfalls nearly forced the agency to slash service absent new revenues or subsidies to close the gap. Leaders in Maryland, D.C., and Virginia were able to provide the additional operating funding assistance needed to prevent such drastic cuts, but an impending FY26 funding cliff looms large. Maryland is also facing a significant transportation budget shortfall, which may lead to significant service cuts and reductions to MTA and local transit systems' preservation funds.⁸



Roads

While roadway congestion experienced a temporary reprieve during the onset of the pandemic, traffic and congestion is coming back.

As of 2022, roadway delays in Washington, D.C. were still 33% lower than pre-COVID; however, delays increased by 89% from 2021, and the number of downtown trips increased by 23%.⁹ By the end of 2022, traffic volume overall in the Washington metro area was back to 94% of pre-pandemic norms.¹⁰ As of January 2024, by some measures D.C. had the 2nd worst traffic in the country, while Baltimore ranked 6th worst.¹¹

"Mobility in the region is critical for continued, sustained economic growth. The investment in a robust and multimodal transportation network has never been more important – for both the region and its leading employers."

Robert D. Moser, Jr., CEO, Clark Construction

In Baltimore, roadway delays were down 35% in 2022 compared to pre-COVID but had risen 49% from the year before.¹² Historically, Richmond has had fewer congestion concerns – it was the least congested large urban area in the nation in 2019 out of more than 30 urban areas surveyed. But mounting evidence suggests that is changing, especially as the region grows and welcomes an influx of new residents.^{13, 14}

Transportation Trends Hit a Speed Bump

In 2018, congestion and transit ridership were both expected to increase by up to 150% through 2040.

While the onset of the pandemic provided temporary relief from congestion, a recent study from the Washington area showed average drive travel times increased about 20% to 25% on weekends between 2019 and 2022.¹⁵

In the wake of COVID-19, transportation departments are still strategizing how to account for shifting transportation trends and whether these trends represent a permanent shift or a short- to medium-term blip.¹⁶

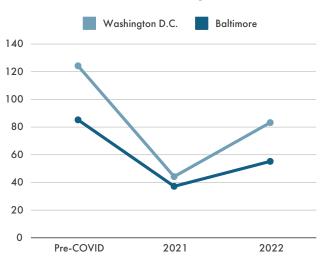


Figure 2: Source: INRIX 2022 Global Traffic Scorecard Note: Richmond was not included in the referenced study.



Refreshed Next Moves (2024-2028)

Recognizing the progress and major shifts that have occurred since the original Blueprint was published, this Refresh is intended to help the region recalibrate on its path toward a connected, consumer-oriented, equitable, and innovative mobility system.

In this Refresh, the Partnership maintains its focus on the seven solution areas identified in 2018. Within each, we update, refine, and consolidate the Next Moves needed to achieve each solution objective.

These Refreshed Next Moves reflect today's regional landscape and ongoing discussions with business, institutional, and government stakeholders to advance our shared goal for a seamless, superregional transportation system that enhances economic competitiveness and quality of life. Appendix A provides a table of these refreshed next moves with additional details on project costs and estimated timelines.

SOLUTION 1: MODERNIZE INTERCITY AND COMMUTER RAIL

- 1a. Break ground on the new Long Bridge and Frederick Douglass Tunnel
- 1b. Modernize the region's gateway rail stations, including Washington Union, Baltimore Penn, and Richmond Staples Mill Stations
- **1c.** Expand regional rail capacity and enable regional run-through service

SOLUTION 2: IMPROVE ROADWAY AND TRAIL PERFORMANCE

- 2a. Replace the American Legion Bridge
- **2b.** Extend the region's performance driven tolling network, including along I-495 and I-270
- 2c. Connect and grow regional trail systems, including the Baltimore's Greenway Trails Network, Washington's Capital Trails Network, and Richmond's Fall Line Trail
- 2d. Restore Baltimore's Francis Scott Key Bridge

SOLUTION 3: CREATE HIGH-PERFORMING PUBLIC TRANSIT

- 3a. Complete the Purple Line in Maryland
- 3b. Advance the Baltimore Red Line
- **3c.** Expand Richmond's Pulse bus rapid transit (BRT) Network
- 3d. Prioritize the efficient movement of buses
- **3e.** Advance rapid transit capital projects across the region

SOLUTION 4: GROW EMPLOYER MOBILITY PROGRAMS

- **4a.** Streamline and integrate public mobility programs and incentives across the region
- **4b.** Share best practices among regional employers, including commuter benefits

SOLUTION 5: EXPAND ACCESS TO OPPORTUNITY

- **5a.** Complete TOD strategies for the Baltimore Region and the MARC Penn Line
- **5b.** Plan for inclusive TOD along Richmond's proposed North-South BRT corridor
- **5c.** Advance WMATA's TOD and Joint Development Strategy and Prince George's Blue Line Corridor Economic Development Platform

SOLUTION 6: ENABLE TECHNOLOGY-DRIVEN FUTURE

- **6a.** Adopt regional data standards, enforcement practices, and payment platforms across mobility providers to provide a seamless consumer experience across the region
- **6b.** Expand the network of Electric Vehicle (EV) charging infrastructure

SOLUTION 7: REFORM GOVERNANCE & FUNDING

- 7a. Implement sustainable funding models for transportation, regional transit operations, and capital investments across Maryland, D.C., and Virginia
- **7b.** Create an Employer Infrastructure Signaling Program

Immediate Priorities (2024-2025)

Within our Refreshed Next Moves, the Partnership has identified six immediate priorities for 2024-2025.

- Implement sustainable funding for regional transit agencies
- (2) Advance the Baltimore Red Line
- 3 Restore D.C. as a world-class passenger rail hub
- (4) Restore Baltimore's Francis Scott Key Bridge
- 5 Support TOD & economically competitive land uses from Baltimore to Richmond
- 6 Facilitate Employer Signaling on Infrastructure Investments





1. IMPLEMENT SUSTAINABLE FUNDING MODELS FOR REGIONAL TRANSIT AGENCIES.

The COVID-19 pandemic exposed the structural challenges and volatility of transit funding. Washington Metropolitan Area Transit Authority (WMATA), Maryland Transit Administration (MTA), and other regional transit systems are vital to the region's economy and its competitiveness, and addressing their near- and long-term operating and capital funding challenges is imperative. To do so, the region must coordinate and collaborate across jurisdictional lines, just as it did in 2018 to secure for Metro \$500M in new annual, dedicated capital funding from Maryland, D.C., Virginia, and the federal government. The Partnership is committed to advancing regionallybacked transit funding solutions with the Metropolitan Washington Council of Governments and the Maryland Transportation Revenue and Infrastructure Needs (TRAIN) Commission that bring our region's transit systems into good repair and match our economic ambitions.¹⁷

2. ADVANCE THE BALTIMORE RED LINE.

After years of uncertainty, Governor Moore re-launched the Baltimore Red Line project. The Red Line will provide a long-overdue connection between East and West Baltimore, creating jobs and opportunities for residents and generating billions of dollars in new economic activity. The Partnership co-leads the Baltimore's Transit Future Coalition with the Greater Baltimore Committee and will work to ensure the project meets the needs of the Baltimore region.

3. RESTORE WASHINGTON, D.C., AS A WORLD-CLASS PASSENGER RAIL HUB.

The Washington Union Station Expansion Project and the new Long Bridge – part of the Transforming Rail in Virginia program – are megaprojects essential to unlocking core goals of the <u>Capital Region Rail Vision</u>. They represent generational opportunities to invest in and expand access for the super-region's diverse workforce and enhance economic competitiveness. In March 2024, the Federal Railroad Administration issued the Final Environmental Impact Statement and Record of Decision for the Union Station Expansion Project, officially allowing the transformative, \$8.8B project to enhance run-through rail service and multimodal options to move forward. The Partnership has also supported more than \$1B in federal grant applications to secure full funding for Phase 1 of Transforming Rail in Virginia, and in December 2023, the new Long Bridge project was awarded \$729M in federal funding.

4. RESTORE BALTIMORE'S FRANCIS SCOTT KEY BRIDGE.

The Key Bridge played a vital role in connecting the region and facilitating the movement of goods, services, and tens of thousands of daily commuters. Its failure has had an immense impact on businesses, residences, and communities across the region. The Partnership is committed to advocating for the funding, resources and solutions needed to rebuild the Key Bridge.

5. SUPPORT TOD & ECONOMICALLY COMPETITIVE LAND USES.

From Baltimore to Richmond, maximizing dense, mixeduse transit-oriented development (TOD) can supercharge inclusive economic growth, increasing quality of life and access to jobs, health care, and education. Proactive TOD planning in the Richmond region is unlocking economic opportunity, particularly along the Pulse Corridor, and will continue to be important as the city advances a new, North-South bus rapid transit line. The Partnership recognizes TOD as a cost-effective strategy to ensure the long-term vibrancy and vitality of the region's economy as well as the sustainability and financial viability of regional transit operations.

6. FACILITATE EMPLOYER SIGNALING ON INFRASTRUCTURE INVESTMENTS.

The most successful regions benefiting from federal infrastructure investments are well-coordinated across levels of government and the public and private sectors. With support from The Kresge Foundation, the Partnership has launched a pilot program facilitating cross-sector collaboration to enhance our regional capacity to win federal transportation grants that can strengthen inclusive economic growth and regional competitiveness.

Progress Update

Over the past several months, the Partnership team engaged Board and regional partners, industry experts, and local stakeholders to assess progress made against the original 2018 strategy. Recognizing the historic economic and social shifts brought by the pandemic, the team gauged whether priorities have shifted over the past five years.

This report uses a "stoplight" indicator for each of the original 2018 Blueprint's seven solution areas to show where there has been strong and measurable progress toward desired outcomes and where progress has been slow, delayed, or priorities may have shifted because of the pandemic.

Our overall ratings within the solution areas are as follows:

Blueprint Solution Progress Overview

- Solution 1: Modernize Intercity & Commuter Rail
- Solution 2: Improve Roadway & Trail Performance
- Solution 3: Create High-Performing Public Transit
- Solution 4: Grow Employer Mobility Programs
- Solution 5: Expand Access to Opportunity
- Solution 6: Enable Technology-Driven Future
- Solution 7: Reform Governance & Funding

The region has made major steps over the past five years to advance the Blueprint's goals to modernize intercity & commuter rail and expand access to opportunity.

In contrast, the original Blueprint strategy recommended accelerating the adoption of employer mobility programs — such as increased telework and flexible hours — to reduce peak-hour congestion. While this strategy was under-utilized in 2018 and thus earns a "red" rating, the rapid onset of pandemic-era commuting patterns shifted the focus and scope for employer mobility programming.

The pandemic has also created new fault lines in the region's transportation network. Public transit service recovery and system expansion across the region has been encouraging,

but uneven, with transportation funding challenges on the horizon. Meanwhile, employer mobility programs and technological innovations have yet to deliver on their full, transformative potential, as roadways are returning to pre-pandemic congestion levels and interconnected regional trail networks remain mostly on paper. Likewise, transportation funding has become more precarious amidst lingering economic impacts and anticipated revenue shortfalls from the pandemic.

Legend: Blueprint Progress

Strong and measurable progress towards desired outcomes.
Delays and/or shifts in priority with measurable evidence of both progress and delays/priority shifts.
Minimal evidence of progress and/or major priority shifts have occurred due to the pandemic.

In the following pages, the Partnership takes a deeper dive into each solution area, progress to date, and offers suggested project and policy next moves to keep the vision of a world-class, regional transportation system that connects all residents to opportunity — on track.

> "When one part of the region wins, we all win. As residents gain access to more jobs, health care providers, and educational opportunities across the region, the vibrancy and vitality of our economy grows."

Grant Verstandig, Founder, Chairman & CEO Red Cell Partners





PROGRESS ON SOLUTION 1 Modernize Intercity & Commuter Rail

ACTION 1.1

Streamline planning and secure funding for projects that remove bottlenecks limiting the rail system's speed, frequency, reliability, and growth.

ACTION 1.2

Create a redevelopment compact to expand and modernize Union Station; redevelop Baltimore Penn Station and Staples Mill Station.

ACTION 1.3

Create a seamless commuter rail network by expanding and integrating MARC and VRE services.

Why This Matters

Relative to peers in the U.S., the region has robust intercity and commuter rail connections. In 2022, there were more than 10 million trips across Amtrak, MARC, and VRE trains in the region.^{18, 19}

However, when compared to the rail networks of global peers, the region's rail service falls short. It is still slower, less reliable, and less frequent than intercity and commuter service in many major economic centers around the globe. Once the Partnership's <u>Capital Region Rail Vision</u> is implemented, the region can expect an increase in economic productivity of \$1.3 billion annually from the expanded rail service, \$40 billion from the capital program, hundreds of thousands new of quality jobs created, and greater access to opportunity across the region.²⁰ Union Station expansion and Long Bridge construction together emerge as immediate priorities given their importance to facilitating through-running service connecting Virginia and points south with the Northeast Corridor.

Big Moves Since 2018

- The \$8.8B Washington Union Station Expansion Project received final federal regulatory approval (FEIS and ROD).
- The new \$2B Long Bridge between D.C. and VA is funded for completion by 2030.
- Construction on the \$6B Frederick Douglass Tunnel began in 2023.
- Baltimore Penn Station's \$90M Renovation began in 2022.
- The Virginia Passenger Railway Authority was created.
- Maryland signed a framework agreement in 2023 with Virginia and Delaware to work to implement run-through commuter rail service across borders.

Partnership's Role

- Creating the <u>Capital Region Rail Vision</u> a 25-year blueprint to transform regional rail service and infrastructure
- Supporting more than \$1.2B in local applications for federal rail grants
- Rallying business leaders behind policies to advance the Vision, including the <u>2022 Maryland Regional</u> <u>Rail Transformation Act</u>

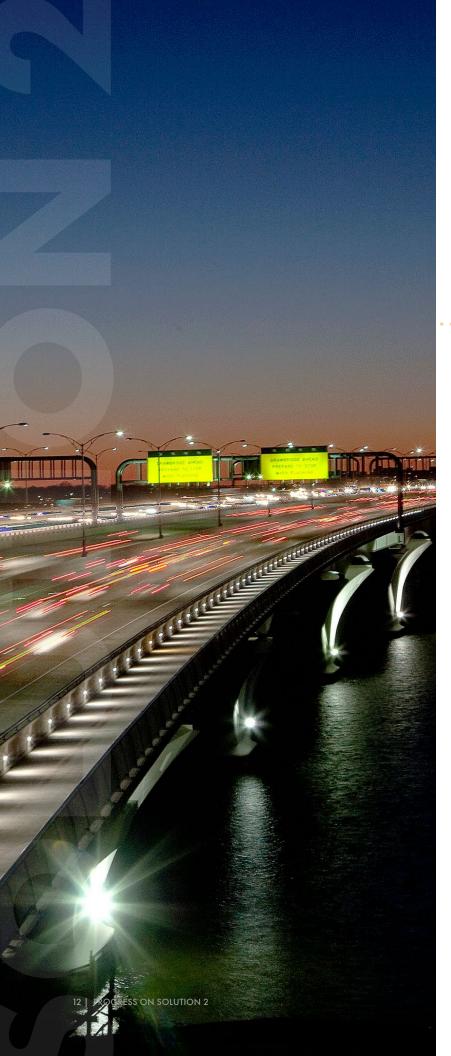
Refreshed Next Moves: 2024-2028

Despite significant progress since 2018, the region must remain attentive to keep these transformative rail infrastructure projects on track. To accelerate progress against Solution 1, The Partnership will work with stakeholders across the region to:

- 1a. Break ground on the new Long Bridge and Frederick Douglass Tunnel
- 1b. Modernize the region's gateway rail stations, including Washington Union, Baltimore Penn, Richmond Staples Mill Stations
- **1c.** Expand regional rail capacity and enable regional run-through service via Union Station



Figure 3: Map of the Regional Rail Network; Source: Capital Region Rail Vision



PROGRESS ON SOLUTION 2

Improve Roadway & Trail Performance

ACTION 2.2

Expand and coordinate the region's performance-driven toll lane network.

ACTION 2.2

Investigate a system to charge drivers entering the Washington metro area's most congested central business districts.

ACTION 2.3

Complete the Baltimore Greenway Trails Network and Capital Trails Network and establish a Richmond trail network strategy.

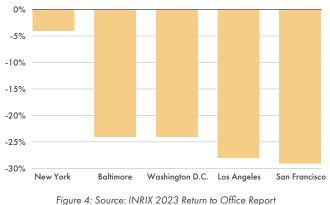
Why This Matters

When the Blueprint was published, congestion was expected to increase by 150% through 2040 – five years later, congestion across the D.C., Baltimore, and Richmond urban areas fell by an average of 30% from precovid levels.²¹ However, even with hybrid and remote work, congestion is quickly rebounding across the region.

Recent research suggests average trip times in the Washington area are now exceeding prepandemic averages.²² Traffic in Baltimore and Washington is frequently rated among the 10 worst cities in the country in terms of lost time and productivity.²³ As employers and the federal government ramp up return-to-office policies, congestion mitigation — with tools such as performance-driven tolling and high-quality alternatives to driving alone — will remain critical for the region's long-term economic competitiveness. Expanding and connecting the region's multi-use trail networks is one low-cost alternative that can help alleviate congestion.

Big Moves Since 2018

- Virginia opened new I-395, I-66 and I-95 express lanes, and construction for the I-495 northern extension began in 2022.
- The \$266.5*M*, 43.6-mile Richmond-area Fall Line Trail broke ground in October 2023, and the Fall Line Trail vision plan released in 2024.
- Prince George's County secured \$25M from USDOT for trails in underserved communities.
- Mayor Brandon Scott identified the Baltimore Greenway as a priority in his 2020 Action Plan.



Change in Downtown Vehicular Trips 2019-2022

Partnership's Role

- Defining our <u>Performance-Driven Tolling</u> Principles to support a regionally-integrated, equitable tolling network
- Outlining the <u>Benefits of the Baltimore Greenway</u> and joining the Capital Trails Coalition
- Conducting <u>three Capital COVID-19 Snapshots</u> to gauge evolving workplace and mobility trends during the pandemic



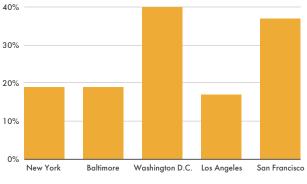


Figure 5: Source: INRIX 2022 Global Traffic Scorecard

Refreshed Next Moves: 2024-2028

Despite significant progress since 2018, the region must remain attentive to keep these transformative rail infrastructure projects on track. To accelerate progress against Solution 1, The Partnership will work with stakeholders across the region to:

- 2a. Replace the American Legion Bridge
- **2b.** Extend the region's performance driven tolling network, including along I-495 and I-270
- 2c. Connect and grow regional trail systems, including the Baltimore's Greenway Trails Network, Washington's Capital Trails Network, and Richmond's Fall Line Trail
- 2d. Restore Baltimore's Francis Scott Key Bridge



PROGRESS ON SOLUTION 3 Create High-Performing Public Transit

ACTION 3.1

Increase the speed and reliability of Baltimore's transit system while establishing a bold vision for an expanded system.

ACTION 3.2

Optimize Washington's bus network and enhance coordination of the metro area's public transportation options.

ACTION 3.3

Expand rapid transit options to better connect consumers with essential destinations throughout the Richmond metro area.

Why This Matters

High-quality, frequent transit strengthens the regional economy by efficiently connecting people to jobs, education, and healthcare. It can also enhance the value of nearby properties and reduce the need for parking and roadway expansions, saving money for developers, commercial and residential renters, and local jurisdictions.²⁴

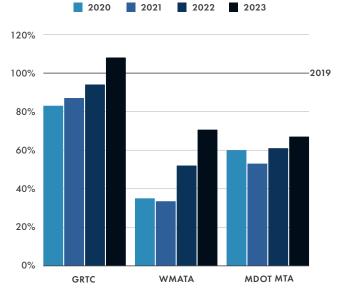
As noted on p. 3, ridership continues to rebound and spread across the week. As transit revenues stabilize, the region must support preservation of reliable service that earns customer trust while also prioritizing the most transformative projects with highest potential to invigorate the region's economic vitality and competitiveness.

Big Moves Since 2018

- The Moore administration revived the 14.1-mile Red Line project in Baltimore to unlock opportunity along the East-West corridor.
- GRTC launched the Pulse BRT route and redesigned its bus network to take advantage of the new transit 'spine.'
- WMATA launched its Better Bus Network Redesign, an initiative to rethink and revitalize bus service to better serve customers' needs.
- WMATA completed the Silver Line Phase 2 extension, connecting Dulles Airport and Loudon County to the Metro network.
- The MTA Purple Line resumed construction and is set for 2027 completion.

Partnership's Role

- Launching the <u>MetroNow Coalition</u> which helped secure \$500 million in dedicated annual capital funding for WMATA's maintenance needs in 2018
- Creating a regional strategy and business-led coalition to advance <u>Baltimore's Transit Future</u>, with the Greater Baltimore Committee



Regional Transit Ridership Relative to 2019

Figure 6: Source: National Transit Database

• Studying the potential for a <u>North-South Bus Rapid</u> <u>Transit</u> line in the Richmond region, paving the way for GRTC to study and select a locally preferred alternative in 2023

Refreshed Next Moves: 2024-2028

The pandemic laid bare the structural challenges and volatility of transit funding around the country. The region will need to identify sustainable funding models that can pay for needed capital investments and high-quality operational service. Meanwhile, the Partnership will advance the following strategic imperatives:

- 3a. Complete the Purple Line in Maryland
- 3b. Advance the Baltimore Red Line
- 3c. Expand Richmond's Pulse BRT Network
- **3d.** Prioritize the efficient movement of buses
- **3e.** Advance rapid transit capital projects across the region



PROGRESS ON SOLUTION 4

Grow Employer Mobility Programs

ACTION 4.1

Challenge the region's employers to implement game-changing commuter programs to enhance talent attraction and collectively reduce congestion during peak travel periods.

ACTION 4.2

Enhance the effectiveness of public commuter programs to increase their use by private employers – to complement an expanded employer commitment.

Why This Matters

The pandemic dramatically changed commuting patterns across the region. Pre-pandemic, only 6.3% of Washington area workers worked remotely – in 2021, that share climbed to 48.1% and dropped down to 33.1% in 2022.²⁵ As commuting decreased, so did demand for traditional employer mobility programs.

Before the pandemic, it was estimated that employer mobility programs adopted at scale could remove 1.5M vehicle trips a day and reduce congestion by 24% in the D.C. metro region.²⁶ However, remote work has disproportionately reduced transit ridership more than roadway congestion. With more workers returning to offices and congestion growing, employers who offer high-quality mobility programs will be more successful in attracting and retaining talent and meeting internal sustainability goals. Innovations in regional fare integration and continued commitment to transit-accessible worksites can also help incentivize and tie back to the value proposition of inperson collaboration. Together, these can maximize the benefits of employer mobility programs.

Big Moves Since 2018

- The Metropolitan Washington Council of Governments (MWCOG) launched the regional incenTrip app to offer rewards and incentives to encourage alternatives to driving alone.
- GRTC implemented zero-fare service in 2020, which has been extended through 2024.
- Fairfax County, Dominion Energy, and other state and local partners launched the Autonomous Shuttle Relay pilot project to test first and last-mile transit options for residents.

Q: What percentage of employees reporting to your primary location in the region do you expect to come onsite during a typical workday during the upcoming months?

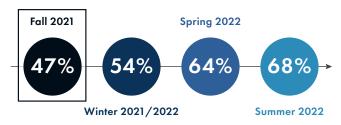


Figure 7: Capital COVID-19 Snapshot Survey, Fall 2021

Partnership's Role

- Launching the Champions of the Commute employer steering committee which guided the Partnership's <u>Capital COVID-19 Snapshots</u> and planning for the return to worksites
- Highlighting <u>transit-accessible worksites</u>, <u>subsidized</u> <u>multimodal access</u>, <u>and equitable transit fares</u> as strategies to enhance regional inclusive economic growth
- Serving on MWCOG's Commuter Connections Employer Recognition Awards selection committee in 2021 and 2023

Refreshed Next Moves: 2024-2028

With congestion increasing as more employees return to the office, innovative employer mobility programs will reemerge as an important tool to reduce congestion and retain workforce talent. The Partnership will work with partners across the region to:

- **4a.** Streamline and integrate public mobility programs and incentives across the region
- **4b.** Share best practices among regional employers, including commuter benefits





PROGRESS ON SOLUTION 5 Expand Access to Opportunity

ACTION 5.1

Increase density and ensure inclusive development in areas near rapid transit corridors.

ACTION 5.2

Adopt local and targeted hiring, procurement, and contracting policies.

Why This Matters

Transit-oriented development (TOD) makes the best use of existing infrastructure assets by concentrating development around highcapacity transportation options. TOD bolsters transit ridership and enables more residents to benefit from increased access to jobs, health care, education, and other opportunities.

Land within a half mile of Metrorail stations makes up only 3% of the Washington metro's total land area, but accounts for \$328B in property value, 40% of the region's jobs, and 25% of its affordable housing.²⁷ In Richmond, the Pulse BRT is expected to generate \$1B in additional assessed value.²⁸ Prioritizing and maximizing dense, mixed-use development near regional transit corridors can accelerate and supercharge inclusive economic growth.

Local and targeted procurement and contracting policies are another strategy to maximize the impact of transportation investments. When paired with inclusive economic development strategies, localities can create more jobs for local talent, more inclusive communities, and keep more dollars in the region.

Big Moves Since 2018

- The Maryland Department of Transportation (MDOT) launched two initiatives to study TOD potential at Baltimore transit stations and along the MARC Penn Line.
- Prince George's County launched the Blue Line Corridor economic development plan, securing \$45.7M for TOD projects to create a dense, multimodal urban corridor.
- WMATA released its first-ever 10-Year Strategic Plan to accelerate TOD and joint-development around Metrorail stations.
- Richmond, Henrico County, and Chesterfield County updated their respective master plans to more heavily incorporate TOD initiatives.



Figure 8: TOD Implementation Strategy Solution, GWP

Partnership's Role

- Partnership organizations <u>collectively allocated</u> \$4.7 billion over five years to support under-represented communities and Minority Business Enterprises (MBEs) in the region
- Studying TOD opportunities at seven stations in <u>Anne Arundel</u> and <u>Prince George's</u> Counties
- Outlining pillars for an inclusive TOD strategy along Richmond's proposed <u>North-South BRT expansion</u>
- Supporting 2024 legislation in Maryland advancing TOD and affordable housing, including <u>HB 12</u>, <u>HB</u> <u>38</u>, and <u>HB 538/SB 484</u>

Refreshed Next Moves: 2024-2028

TOD will continue to be a cost-effective strategy to further inclusive economic development, long-term vibrancy, and the vitality of the region's economy. The Partnership will continue to work with partners across the region to:

- **5a.** Complete TOD strategies for the Baltimore Region and the MARC Penn Line
- **5b.** Plan for inclusive TOD along Richmond's proposed North-South BRT corridor
- 5c. Advance WMATA's TOD and Joint Development Strategy and Prince George's Blue Line Corridor Economic Development initiative

"The region's short- and long-term economic competitiveness will depend on our ability to maximize the benefits of our transportation assets."

Matt Kelly, CEO, JBG Smith



PROGRESS ON SOLUTION 6 Enable a Technology-Driven Future

ACTION 6.1

Build a regional data management system to power all technology actions and improve regional mobility.

ACTION 6.2

Enable the creation of integrated mobility platforms for all public and private mobility options.

ACTION 6.3

Deploy regionally coordinated smart traffic signals to reduce vehicle congestion and speed up bus travel.

ACTION 6.4

Establish a coordinated autonomous vehicle (AV) strategy for the region.

Why This Matters

By integrating new technologies and mobility services, the region can set a national example of transportation efficiency and sustainability. From hardware to software, technology can help identify solutions to ease congestion and create a more seamless mobility network.

Integrated mobility platforms improve the consumer experience and attract new riders by removing barriers across providers.²⁹

Coordinated smart traffic signals, which respond to realtime roadway conditions and prioritize vehicles such as buses or ambulances, can enhance roadway throughput and reduce congestion.³⁰

Recent advances in artificial intelligence may present novel solutions to long-standing mobility challenges, while micromobility options can improve multimodal transportation efficiencies.

Big Moves Since 2018

- WMATA implemented SmarTrip mobile payment (Apple/Google Wallet) to make it easier to ride transit.
- Washington, D.C., announced a \$19 million Bikeshare expansion plan, and Richmond expanded its Bikeshare program.
- WMATA, Arlington Transit, and Alexandria Transit Company (DASH), Fairfax Connector, and Ride On adopted GTFS-RT data standards.
- The District Department of Transportation (DDOT) and WMATA partnered to launch Clear Lanes, an effort to improve bus travel times and enhance bus stop safety and accessibility.

Partnership's Role

- Exploring the massive, untapped potential and <u>Promise of Integrated Mobility</u> in the region.
- Highlighting the integration of technology across regional transit agencies in <u>MetroNow Bus</u> <u>Progress Reports</u>.
- Supporting \$90M in bus electrification grant applications throughout the region.

Refreshed Next Moves: 2024-2028

The rapid growth of micromobility in the region and the adoption of mobile transit payments and real-time data updates through GTFS-RT have helped to make regional transportation more accessible and convenient. However, these technologies will need to be integrated across modes to create a more seamless mobility network. The Partnership will continue to work with partners across the region to:

- **6a.** Adopt regional data standards and payment platforms across mobility providers to provide a seamless consumer experience across the region
- **6b.** Expand the network of Electric Vehicle (EV) charging infrastructure

"Technology can help the region devise new solutions to stubborn challenges, from easing congestion to simplifying wayfinding."

Donald Blue Jenkins, President, Washington Gas





PROGRESS ON SOLUTION 7

Reform Governance & Funding

ACTION 7.1

Measure and report the outcomes and equity benefits of each capital transportation investment.

ACTION 7.2

Create a new regional governance structure for Baltimore public transportation.

ACTION 7.3

Increase federal transportation investments to better maintain the existing system and complete critical capital investments.

Why This Matters

The presence of three states, 35 counties, and 11 independent cities, along with a multitude of public and private transportation providers has challenged regional governance and funding. However, the region can increase the efficiency and effectiveness of its regional transportation investments by coordinating across jurisdictions, aligning investments with performance-based goals, and incorporating equity metrics within funding decisions.

Big Moves Since 2018

- Congress enacted the Bipartisan Infrastructure Law, a \$1 trillion investment into the nation's transportation and digital infrastructure.
- The Virginia General Assembly established the Richmond-area Central Virginia Transportation Authority with funding from new regional sales and gas taxes.

- The Maryland General Assembly established the Baltimore Regional Transit Commission.
- Maryland created the Commission on Transportation Revenue and Infrastructure Needs to assess state transportation funding needs and potential solutions.
- MWCOG launched a regional workplan for stakeholders to address WMATA's long-term operational funding needs.

Partnership's Role

- Launching the <u>MetroNow Coalition</u> to secure \$500 million in dedicated annual capital funding for WMATA's maintenance needs and more than \$3B in federal infrastructure and pandemic relief funding
- Charting the path forward on inclusive transportation policies and initiatives through our <u>Inclusive</u> <u>Growth Blueprint</u>
- Rallying business leaders behind policies to advance the Maryland Commission on Transportation Revenue and Infrastructure Needs and Baltimore Regional Transit Commission

Refreshed Next Moves: 2024-2028

The adoption of electric vehicles, advances in fuel efficiency, and the historic drop in transit ridership have threatened two of the largest sources of regional transportation funding — gas tax revenues and transit fares. As the region continues to recover from the pandemic, sustainable sources of transportation funding and effective governance are more important than ever. The Partnership will work with partners across the region to advance:

- 7a. Implement sustainable funding models for transportation, regional transit operations, and capital investments across Maryland, D.C., and Virginia
- **7b.** Create an Employer Infrastructure Signaling Program to maximize federal investments

Conclusion

Over the past five years, the Greater Washington Partnership has had many reasons to celebrate progress against the Blueprint for Regional Mobility. From Baltimore to Richmond, the region advanced landmark transit expansions, transformative rail investments, and the emergence of a regional performance-driven tolling network.

Beyond the Blueprint, Partnership products — such as the <u>Capital Region Rail Vision</u>, <u>Building the Transit-</u> <u>Oriented Region</u>, <u>Connecting the Richmond Region</u>, and <u>Baltimore's Transit Future</u> — have offered regional and localized strategies to modernize our transportation systems, reduce choking traffic congestion, and position the economy for success in an increasingly competitive world.

The Partnership has also worked with stakeholders across the region to secure major transportation and mobility investments:

- The \$2B Long Bridge and \$6B Frederick Douglass Tunnel projects are on track.
- Maryland signed a framework agreement with Virginia and Delaware for regional run-through rail service.
- 1-66, 1-95, and 1-495 express lanes in Virginia are either complete or nearing completion.
- The overwhelming success of the Pulse BRT in Richmond has fast-tracked development of North-South network expansion.
- WMATA completed the Silver Line extension, opening rapid transit access to Dulles International airport for the first time.

Parallel to these significant developments, the COVID-19 pandemic brought considerable changes in commuting and travel patterns. Early in the pandemic, transit ridership declined steeply across the region. Today, off-peak ridership is surging and some systems — GRTC and DASH — have exceeded pre-pandemic ridership.

The full effects and longevity of COVID-induced transportation trends remain uncertain. Despite the uncertainty, transportation and infrastructure remain at the core of regional economic competitiveness.

Sustaining long-term investments to create modern transportation networks — from rails and trails to transit and roadways — remains one of the best investment strategies to expand access to opportunity and create communities where people want to live, work, play, and stay.

This 5-Year Refresh is an opportunity for the region to celebrate progress, while recognizing there is much more work to be done to create a transportation system that connects the super-region, improves the customer experience, ensures equitable access, and integrates innovation. The Partnership looks forward to continuing the work with our partners across the region to help bring that vision to life over the next five years.

"We've seen significant progress on the regional mobility priorities identified by the Partnership in 2018. Looking ahead to the next five years and beyond, we must think and act boldly to shape our transportation network into an asset that supports this region as the best in the world to live, work, and build a business."

Kathy Hollinger, CEO, Greater Washington Partnership



Appendix A: Refreshed Next Moves — Project Details

Project	Capital Cost Est.	Status	Metro Area(s)	Primary Benefit	Est. Timeline to Completion
Solution	n 1a: Break grou	nd on the new Lo	ng Bridge and Fred	lerick Douglass Tunnel	
New Long Bridge	\$2,300,000,000	Pre-Construction	Washington	Connect the Super-Region	2030
Frederick Douglass Tunnel	\$6,000,000,000	Pre-Construction	Baltimore	Connect the Super-Region	2035
	Solution 1b:	Modernize the re	egion's gateway ra	il stations	
Washington Union Station Expansion Project (SEP)	\$8,800,000,000	Planning	Washington	Connect the Super-Region	2040
Baltimore Penn Station	\$150,000,000	Under Construction	Baltimore	Improve Consumer Experience	2025
West Baltimore MARC Station	N/A	Planning	Baltimore	Connect the Super-Region	2035
Richmond Staples Mill Station	N/A	Not Started	Richmond	Improve Consumer Experience	N/A
Richmond Main Street Station	N/A	Not Started	Richmond	Improve Consumer Experience	N/A
New Carrollton Station	\$47,000,000	Planning	Washington	Improve Consumer Experience	N/A
Crystal City Station	\$50,114,624	Early Planning	Washington	Improve Consumer Experience	2026
Alexandria Station	\$30,975,014	Funded	Washington	Improve Consumer Experience	2026
Solution 1c: Exp	and regional rail	capacity and ena	ble regional run-th	rough service via Union St	ation
MARC Penn Line fourth track	N/A	Early Planning	Washington, Baltimore	Connect the Super-Region	2050
MARC Brunswick & Camden Line capacity improvements	N/A	Early Planning	Washington, Baltimore	Connect the Super-Region	2050
Franconia-Springfield Bypass	\$405,000,000	Funded	Washington	Connect the Super-Region	2026
VRE Manassas Line Enhancements	\$137,230,000	Funded	Washington	Connect the Super-Region	2027
L'Enfant Fourth Track and Station Improvements Project	\$79,980,000	Funded	Washington	Connect the Super-Region	2029
Ivy City Yard Upgrades	\$350,000,000	Early Planning	Washington	Improve Consumer Experience	2040
First Street Tunnel	N/A	Not Started	Washington	Connect the Super-Region	2040
			erican Legion Bridge		
New American Legion Bridge	\$4,253,000,000	Not Started	Washington	Connect the Super-Region	2031
				ding along I-495 and I-27	
I-495 and I-270 in MD I-495 Southside Extension in VA	N/A \$2,670,000,000	Not Started Funded	Washington Washington, Richmond	Connect the Super-Region Integrate Innovation	2031 2026
I-95 in VA (Fredericksburg)	\$670,000,000	Under Construction	Washington, Richmond	Integrate Innovation	2023
I-95 in VA (Rapp. River Crossing)	\$132,000,000	Under Construction	Washington, Richmond	Integrate Innovation	2024
	2c: C	onnect and grow	regional trail syste	ms	
altimore Greenway Trails network	\$28,000,000	Planning	Baltimore	Ensure Equitable Access	N/A
Washington Capital Trails network	\$1,100,516,460	Under Construction	Washington	Ensure Equitable Access	Ongoing
Richmond Fall Line Trail system	\$409,090,000	Under Construction	Richmond	Ensure Equitable Access	2026
	2d. Res	tore Baltimore's	Francis Scott Key B	ridge	
Reconstruction of the Francis Scott Key Bridge	\$1,900,000,000	Planning	Baltimore	Connect the Super-Region	N/A

	<u>3a:</u>	Complete the Pur	ple Line in Marylar	nd	
Purple Line	\$9,400,000,000	Under Construction	Washington	Ensure Equitable Access	2027
	3	b: Advance the B	altimore Red Line		
Baltimore Red Line	\$2,000,000,000- \$7,200,000,000	Planning	Baltimore	Ensure Equitable Access	2035
	3	c: Expand Richmo	nd's BRT Network		
North-South BRT Project	\$100,000,000	Planning	Richmond	Ensure Equitable Access	2029
Westward expansion of the Pulse BRT	N/A	Early Planning	Richmond	Ensure Equitable Access	2026
	3d: Pr	ioritize the efficie	nt movement of bu	ises.	
WMATA's Better Bus Network Redesign	\$200,000,000/yr	Planning	Washington	Ensure Equitable Access	2025
Automated Bus Lane Enforcement & Standardization across the region	N/A	Planning	All	Improve Consumer Experience	Ongoing
Implementation of transit signal priority (TSP) technology	N/A	Planning	All	Improve Consumer Experience	Ongoing
	3e: Advance	rapid transit cap	ital projects across	the region	
Baltimore North-South Transit corridor	\$500,000,000- \$4,000,000,000	Early Planning	Baltimore	Ensure Equitable Access	2036
Fairfax County Richmond Highway BRT	\$730,000,000	Planning	Washington	Ensure Equitable Access	2030
Montgomery County Flash BRT expansion	\$408,006,000	Planning	Washington	Ensure Equitable Access	2028
4a: Stream	nline and integra	te public mobility	programs and inc	entives across the region	
Streamlined and regionally ntegrated public mobility programs and incentives	N/A	Not Started	All	Improve Consumer Experience	Ongoing
4b: She	are best-practices	among regional	employers, includi	ng commuter benefits	
Best practice sharing among regional employers, including commuter benefits	N/A	Not Started	All	Integrate Innovation	Ongoing
5a: Co	omplete TOD stra	tegies for the Bal	timore Region and	the MARC Penn Line	
MARC Penn Line and Baltimore region TOD	N/A	Early Planning	Washington, Baltimore	Ensure Equitable Access	2027
5b: Plo	an for inclusive T	OD along Richmon	nd's proposed Nor	th-South BRT corridor	
Inclusive TOD planning and ivestments along Richmond's North- South BRT corridor	N/A	Not Started	Richmond	Ensure Equitable Access	N/A
5c: Advance WMATA	's TOD and Joint	Development Str	ategy and Prince G	eorge's Blue Line Corridor	initiative
WMATA's TOD and Joint Development Strategy	N/A	Planning	Washington	Ensure Equitable Access	2032
Prince George's County's Blue Line Corridor Economic Development Platform	\$45,700,000	Planning	Washington	Ensure Equitable Access	2030
	6a: Adopt re	gional data stand	ards and payment	platforms	
Data standards and integrated payment platforms	N/A	Not Started	All	Integrate Innovation	Ongoing
6	b: Expand the ne	twork of Electric	Vehicle (EV) chargii	ng infrastructure	
Electric vehicle (EV) charging infrastructure	N/A	Early Planning	All	Integrate Innovation	Ongoing
7a: Implement sustaina	ble funding mod	els for transporta	tion, regional trans	sit operations, and capital i	investm <u>ents</u>
Sustainable funding models for transportation across Maryland, D.C., and Virginia	N/A	Early Planning	All	Integrate Innovation	2024
	7b: Create o	an Employer Infra	istructure Signaling	Program	
The Partnership's Employer Signaling: Infrastructure Investments Index	N/A	Underway	All	Integrate Innovation	2024

References

- "March 2024 Raw Monthly Ridership." National Transit Database, April 2024, <u>https://www.transit.</u> <u>dot.gov/ntd/ntd-data</u>.
- 2 "February 2024 Ridership Snapshot." Washington Metropolitan Area Transit Authority (WMATA), March 2024, p. 9, <u>https://www.wmata.com/</u> <u>initiatives/ridership-portal/upload/February-</u> <u>2024-Ridership-Snapshot.pdf</u>.
- 3 See 1 re: NTD ridership data.
- 4 See 2 re: WMATA February 2024 Ridership Snapshot.
- 5 "Monthly Ridership Report, January 2024." Greater Richmond Transportation Company (GRTC), February 2024, p. 42, <u>https://ridegrtc.com/</u> <u>media/main/GRTC_Board_Packet_1-16-2024.</u> <u>pdf</u>.
- 6 See 1 re: NTD ridership data.
- 7 "Amtrak Virginia Ridership Reports." Virginia Passenger Rail Authority, 2019 and 2023, <u>https://</u><u>vapassengerrailauthority.org/resources/ridership-reports/</u>.
- 8 "Maryland Department of Transportation Releases Updated Budget Plan Focused on Fiscal Sustainability, Safety and Inclusive Economic Growth." Maryland Department of Transportation, December 5, 2023, <u>https://www.mdot.</u> <u>maryland.gov/tso/pages/newsroomdetails.</u> <u>aspx?newsld=764&PageId=38</u>.
- 9 "2022 INRIX Global Traffic Scorecard." INRIX, 2023, <u>https://inrix.com/scorecard/</u>.

- 10 Denham, Hannah. "D.C.-area traffic is nearly back to pre-pandemic levels even as offices remain half empty. Why commuters are still choosing to drive." Washington Business Journal, April 10, 2024, <u>https://www.bizjournals.com/washington/ news/2023/04/10/dc-traffic-pandemic-metro. html.</u>
- 11 "TomTom Traffic Index: 2023 Ranking." TomTom, January 10, 2024, <u>https://www.tomtom.com/</u> <u>traffic-index/ranking/</u>.
- 12 See 9 re: INRIX traffic scorecard.
- 13 Large urban areas are metropolitan areas with population of 1 to 3 million.
- 14 Schrank, David, et al. "Urban Mobility Report 2019." Texas A&M Transportation Institute, August 2019, p. 27, <u>https://static.tti.tamu.edu/</u><u>tti.tamu.edu/documents/umr/archive/mobility-report-2019.pdf</u>.
- 15 Duncan, Ian, et al. "New habits are making more commutes miserable." The Washington Post, September 22, 2023, <u>https://www.washingtonpost.com/</u> <u>transportation/2023/09/22/dc-commute-carstraffic-metro/</u>.
- 16 The 2022-2026 USDOT Strategic Plan placed a new emphasis on returning transit ridership to 100% of pre-Covid levels by 2026, as it also aims to increase the relative amount of pedestrian and transit trips from 4% to 6%. Similarly, one of the Maryland Transit Administration's current priorities is to return bus, metro, and MARC ridership to their pre-pandemic levels.

17 The Maryland Commission on Transportation Revenue and Infrastructure Needs (the TRAIN Commission) was established by Chapter 455, Acts of 2023, to review, evaluate, and make recommendations on the prioritization and funding of transportation projects. See: <u>https:// www.mdot.maryland.gov/tso/Pages/Index.</u> <u>aspx?PageId=205; https://mgaleg.maryland.</u> <u>gov/2023RS/Chapters_noln/CH_455_sb0024e.</u> <u>pdf.</u>

- 18 See 1 re: NTD ridership data.
- 19 "Amtrak State Fact Sheets." Amtrak, 2022, <u>https://www.amtrak.com/state-fact-sheets</u>.
- 20 "Capital Region Rail Vision." Greater Washington Partnership, December 2020, <u>https://</u> <u>greaterwashingtonpartnership.com/capital-region-</u> <u>rail-vision/</u>.
- 21 See 9 re: INRIX traffic scorecard.
- 22 See 15 re: "New habits are making more commutes miserable."
- 23 See 11 re: TomTom Traffic Index: 2023.
- 24 "Capital Region Blueprint for Regional Mobility." Greater Washington Partnership, November 2018, <u>https://greaterwashingtonpartnership.com/</u> <u>blueprint/</u>.
- 25 Bahrampour, Tara. "Remote work thrived again in 2022, new data show, with DC a top hub," The Washington Post, September 14, 2023, <u>https://www.washingtonpost.com/dc-md-va/2023/09/14/dc-remote-work-jobs-datacensus-bureau/</u>.

- 26 "An Assessment of Regional Initiatives for the National Capital Region: Technical Report on Phase II of the TPB Long-Range Plan Task Force," National Capital Region Transportation Planning Board, 2017, p. 11.
- 27 "Future Financial Planning FY2025-2035," WMATA, June 22, 2023, p. 10, <u>https://www.</u> wmata.com/about/board/meetings/board-pdfs/ upload/3A-Future-Financial-Planning-0621.pdf.
- 28 "Connecting the Richmond Region: From East-West to North-South," Greater Washington Partnership, January 2022, p. 17, <u>https://greaterwashingtonpartnership.com/publications/ connecting-the-richmond-region-from-east-west-tonorth-south/.</u>
- 29 "Integrated Mobility Innovation." Federal Transit Administration, <u>https://www.transit.dot.gov/IMI</u>.
- 30 "Next-Generation Smart Traffic Signals." Federal Highway Safety Administration, <u>https://www.</u> <u>fhwa.dot.gov/publications/research/ear/</u> <u>SmartTrafficSignal.pdf</u>.

